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| **JURY’S RECOMMENDATIONS ON JINR PRIZES FOR 2016** |

**I. Theoretical Physics Research**

First Prize

“Cluster approach for describing nuclear fission”.

Authors: H. Pasca, G. Adamian, A. Andreev, N. Antonenko, R. Jolos, A. Nasirov, T. Shneidman.

Second Prizes

1. “Conformal anomalies, quantum entanglement, boundaries, and distributional geometry.”

Author: D. Fursaev.

2. “Is it possible to discover a dark matter particle with an accelerator?”

Author: V. Bednyakov.

**II. Experimental Physics Research**

First Prizes

1. “Magnetic phenomena in intermetallic compounds RCo2: studies of the limits of the itinerant electron metamagnetism concept”.

Authors: D. Kozlenko, E. Lukin, S. Kichanov, A. Rutkauskas, B. Savenko, E. Burzo, P. Vlaic, Dang Ngoac Toan.

2. **“**Investigation of the spontaneous fission properties of short-lived isotopes of transfermium elements”.

Authors: A. Svirikhin, A. Yeremin, A. Popeko, O. Malyshev, V. Chepigin, A. Isaev, M. Chelnokov, E. Sokol, A. Andreev, Yu. Popov.

Second Prize

“Investigations of hadronic hydrogen-like atoms in the DIRAC experiment”.

Authors: L. Afanasiev, O. Gorchakov, K. Gritsai, M. Zhabitsky, V. Kruglov, L. Kruglova, A. Kulikov, R. Lednický, L. Nemenov, M. Nikitin.

**III. Physics Instruments and Methods**

First Prize

“Investigation of exotic radioactive decays using vertex method: project EXPERT”.

Authors: A. Bezbakh, A. Gorshkov, L. Grigorenko, G. Kaminski, S. Krupko, I*.* Mukha, M. Pfutzner, R. Slepnev, A. Fomichev, V. Chudoba.

Second Prize

“Construction and commissioning of the heavy-ion linear accelerator of the NICA injection complex”.

Authors: А. Butenko, А. Govorov, D. Donets, V. Kobets, K. Levterov, V. Monchinsky, A. Sidorin, U. Ratzinger, G. Trubnikov, H. Höltermann.

**IV. Applied Physics Research**

First Prize

“Reduction of radiation damage in biological objects by means of laser radiation”.

Authors: K. Voskanyan, G. Mitsyn, V. Gaevsky.

Second Prize

“Neutron activation analysis for ecological state assessment of coastal ecosystems of the Black Sea”.

Authors: A. Kravtsova, P. Nekhoroshkov, M. Frontasyeva, I. Zinicovscaia, N. Yushin, O. Bunkova, I. Stukolova, A. Yakovlev, A. Kamnev.

**Encouraging Prizes**

1. “Physics research of the JINR group in the ATLAS experiment at the Large Hadron Collider”.

Authors: V. Bednyakov, I. Eletskikh, M. Chizhov, E. Khramov, L. Gladilin, V. Lyubushkin, Yu. Kulchitsky, E. Plotnikova, P. Tereshko.

2. “Peculiarity of nuclear reaction mechanism by weakly bound light nuclei”.

Authors: S. Lukyanov, Yu. Sobolev, A. Denikin, V. Maslov, M. Naumenko, Yu. Penionzhkevich, V. Samarin, N. Skobelev, A. Kugler, J. Mrazek.

3. “Investigation of the deeply subcritical target assembly QUINTA consisting of 512 kg natural uranium irradiated by deuterons at an energy range from 1 to 8 GeV at the JINR Nuclotron”.

Authors: V. Furman, N. Gundorin, J. Adam, A. Baldin, A. Berlev, A. Solnyshkin, S. Tyutyunnikov, V. Voronko, L. Zavorka, V. Chilap.